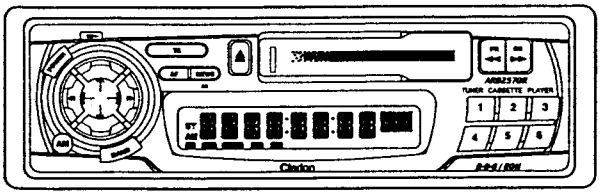
clarion
Clarion (Malaysia) Sdn. Bhd.
Phase 3, Free Trade Zone One, 11900 Bayan Lepas, Penang, Malaysia
Tel: (60) 4-6439-106, Fax: (60) 4-6439-108
Clarion Co. Ltd.
Export Division : 22-3, Shibuya 2 - chome, Shibuyaku, Tokyo, 150-8335 Japan Tel: 03-3400-1121
Published by Clarion (Malaysia)
298-5733-00 APR. 1999 P
Printed In Malaysia

Service Manual



RDS-EON/FM/MW/LW
Radio Cassette Combination

Model **ARB2570R**

(PE-1657E-B/illumination: Yellow / Green)

■ SPECIFICATIONS

Radio section

Tuning system:	PLL synthesizer tuner
Receiving frequencies:	FM 87.5 to 108MHz MW 531 to 1,602kHz LW 153 to 279kHz

Tape deck section

Wow & Flutter (WRMS):	0.1%
Channel Separation (1kHz):	45dB
Signal to noise ratio:	120μs(normal) 52dB
Frequency response (± 3dB):	120μs(normal) 30Hz to 16kHz

General

Power supply voltage:	DC 14.4V (10.8 to 15.6V allowable)
Current consumption:	Less than 10A
Speaker impedance:	4Ω (4Ω to 8Ω allowable)
Dimensions (mm):	W 178 x H 50 x D 152
Weight:	1.3kg (2.87lb)

■ NOTE

1. We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.

■ FEATURES

1. Electronic quartz-locked PLL tuning
2. AM/FM bands - 1 AM, 3 FM
3. Electronic audio controls (volume/bass/treble/balance/fader)
4. 120W (30W x 4ch) maximum power output
5. DIN chassis with detachable control panel

■ COMPONENTS

PE-1657E-B (YELLOW / GREEN)

Main unit	————	1
Mounting bracket	300-7742-20	1
DCP case	335-5331-30	1
Parts bag	————	
Removal Key	331-2497-20	2
Screw	716-0726-01	1
Spacer	345-3653-01	1

※ Specification and design are subject to change without notice for further improvement.

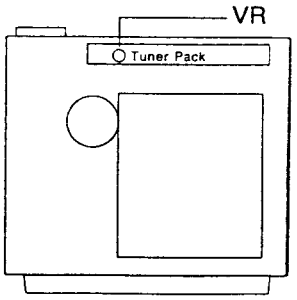
■ To engineers in charge of repair or inspection of our products.

Before repair or inspection,make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.
   The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.
   The use of unspecified parts shall be regarded as remodeling for which we shall not be liable.The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.
2. Place the parts and wiring back in their original positions after replacement or re-wiring.
   For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.
   If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.
3. Check for safety after repair.
   Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary problems around the repaired spots.
   If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
4. Caution in removal and making wiring connection to the parts for the automobile.
   Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur.
   If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
5. Cautions regarding chips.
   Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.
6. Cautions in handling flexible PWB.
   Before working with a soldering iron, make sure that the iron tip temperature is around 270°C. Take care not to apply the iron tip repeatedly (more than three times) to the same patterns. Also take care not to apply the tip with force.
7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

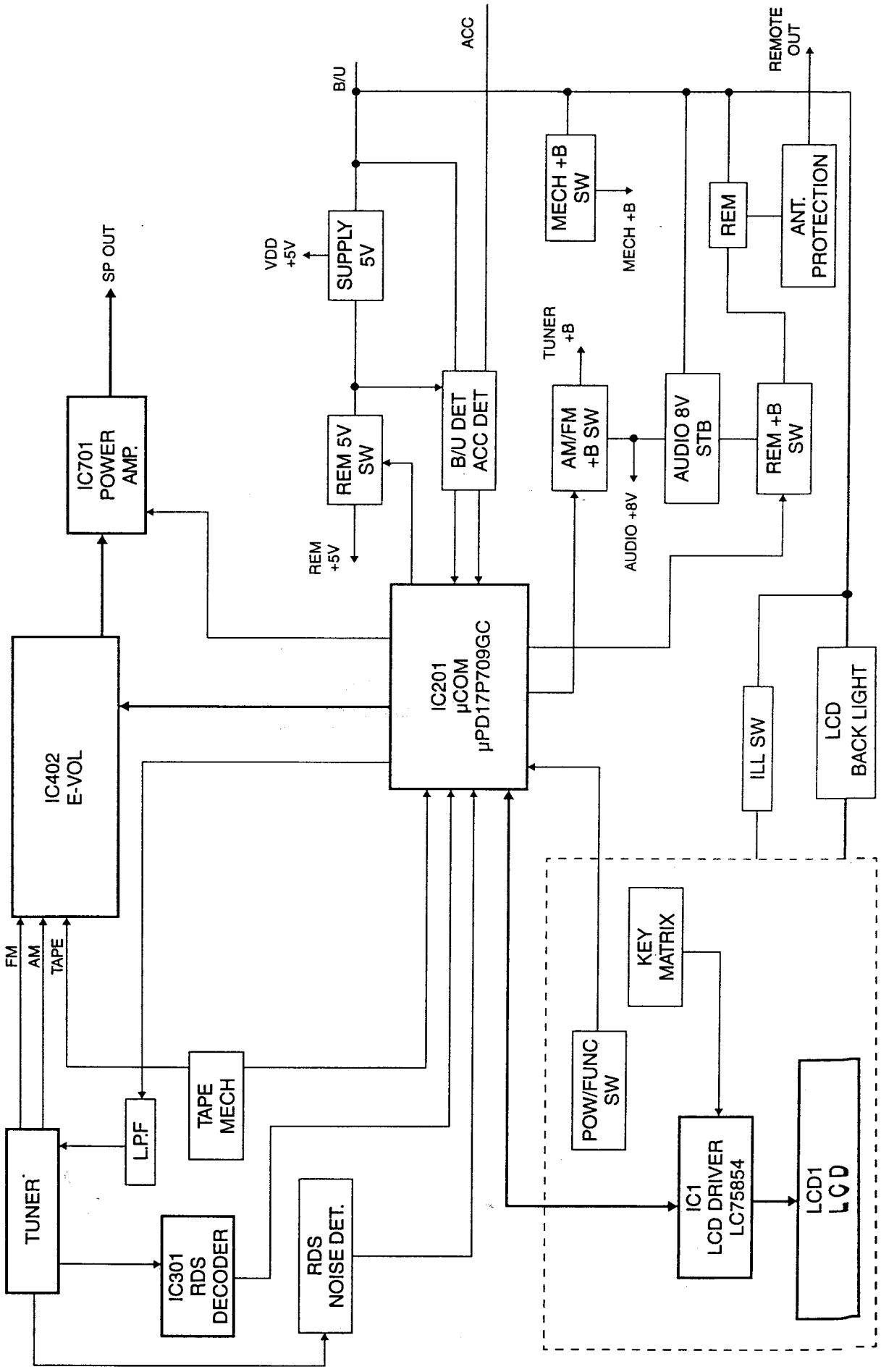
■ ADJUSTMENT

Item	Procedure	Instrument
RDS S-Meter	1. Input the 98.1MHz/30dB (400Hz, 75kHz DEV, AF88%) signal and modulation OFF.	-SSG -Multiplex Signal Generator -Millivoltmeter
	2. Adjust VR on top of the tuner so that the output level at the TP (S-Meter) on main PWB is 3.0± 0.1V	



Top side of main unit

■BLOCK DIAGRAM



■ EXPLANATION OF IC

■ μPD17708GC-543-3B9 052-1910-10
RDS Master Micro computer

Outward Form

80 pins, plastic QFP

Terminal Description

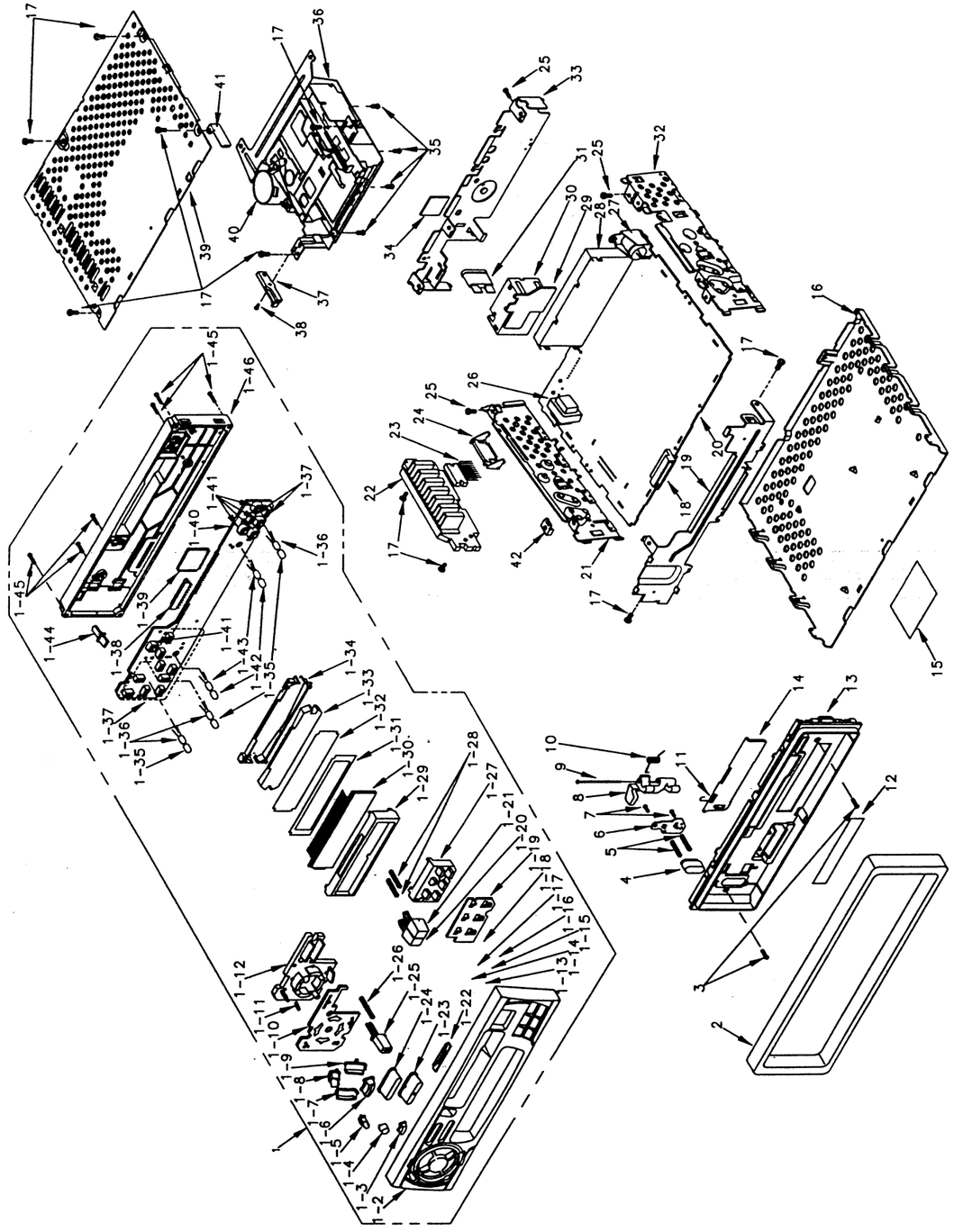
Pin No	Symbol	I/O	Function
1	B/U DET	I	B/U Line Detection
2	KEY INT	I	POWER key input
3	N/C		Not in use
4	$\overline{E3861}$/E3860	I	Switching port : LO
5	FM ONLY	I	Switching port : LO
6	SOFT MUTE OFF	O	Output for Tuner Soft Mute
7	N/C	–	Not in use
8	RDS DX/LO	O	During RDS seek LOCAL=LOW
9	SYS MUTE	O	Audio muting Active HI
10	PHONE INT	I	GND
11	$\overline{TAPE\ IN}$	I	Tape Input detection , Active Low
12	$\overline{FWD}$/REV	I	Tape mode: FWD=LO, REW=HI
13	$\overline{FF/REW}$	I	Tape FF/REW LCD indication, Active LOW
14	MOTOR	O	Power supply +5V for tape-motor switching circuit, Active HI
15	FM DX/LO	O	DX/LOCAL Control port, during LOCAL Active HI
16	RDS MUTE	O	RDS mute output terminal
17	$\overline{REM+B}$	O	Audio system voltage supply controller
18	REM+5	O	Power supply control terminal of microcomputer pull up and LCD driver
19	$\overline{FM\ CNT}$	O	FM tuner Voltage supply controller terminal, Active LO
20	$\overline{AM\ CNT}$	O	AM tuner voltage supply controller terminal, Active LO
21	GND		μ-COM GND
22	KEY AD	I	DCP SW detection port (A/D) P ON - P OFF - P ON voltage drop from 4V - 0V in average
23	RDS S-METER	I	RDS S-METER voltage detection terminal
24	RDS NOISE1	I	RDS noise level detection terminal
25	RDS NOISE2	I	GND
26	FM SD	I	FM Station Detector port
27	AM SD	I	AM Station Detector port
28	IF AM	I	AM IF Count
29	IF FM	I	FM IF Count
30	VDD		VDD
31	FM OSC		FM Oscillation line
32	AM OSC		AM Oscillation line
33	GND		GND
34	ER OUT0	O	FM VT voltage controller
35	ER OUT1	O	AM VT voltage controller
36	TEST0		GND

Pin No	Symbol	I/O	Function
37	L/M	O	LW / MW switching terminal LW Active HI and MW Active LO
38	$\overline{ST\ IND}$	I	FM ST indicator input terminal LO for light up. Light off in other mode and SEEK
39	RDS DISCHG	O	RDS Noise clear
40	BEEP	O	Not in use
41	N/C		Not in use
42	RDS CLK	I	RDS Clock input terminal
43	IF REQ	O	During SEEK mode, terminal Active HI
44	AM DX/LO	O	AM DX/LO control terminal, LOCAL = HI
45	RDS DATA	I	Data input from RDS decoder
47		–	GND
48		–	GND
49		–	GND
50		–	GND
51		–	GND
52		–	GND
53		–	GND
54		–	GND
55		–	GND
56		–	GND
57		–	GND
58		–	GND
59	N/C	–	Not in use
60	N/C	–	Not in use
61	N/C	–	Not in use
62	LCD CE	O	LCD IC driver enable port
63	VOL DO	O	Interactive data with electronic volume control IC
64	VOL CLK	O	Clock for E-Vol
65	LCD CLK	O	Clock for LCD driver
66	LCD DO	O	Data output to LCD driver
67	LCD DI	I	Data input from LCD driver
68		–	GND
69		–	GND
70		–	GND
71		–	GND
72		–	GND
73		–	GND
74	V REG1		GND terminal for A/D converter
75	GND1		μ-COM GND
76	Xout		4.5MHz terminal for crystal
77	Xin		oscillator
78	CE		μ-COM enable +5V terminal
79	VDD		+5V voltage supply terminal
80	RESET	–	Reset input terminal

Note : This is selected at initial retail setting.

■ EXPLODED VIEW • PART LIST

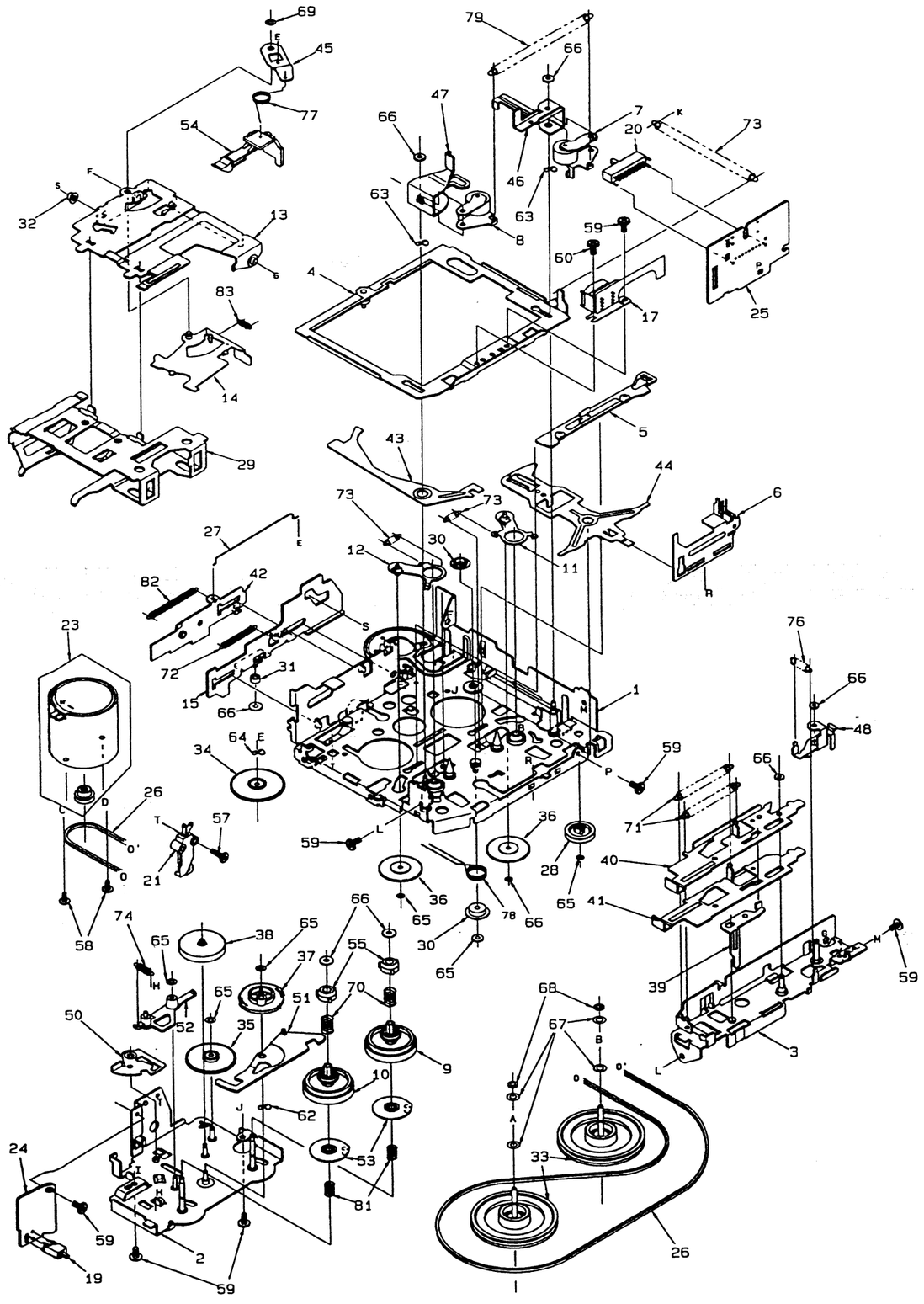
Main Section



NO.	PART NO.	DESCRIPTION	Q'TY
1	DCP-172-700	DCP-ASSY(PE-1657E-B)	1
1-2	370-5788-01	ESCUTCHEON (FRONT)	1
1-3	382-5180-00	BUTTON (BAND)	1
1-4	382-5179-00	BUTTON (AM)	1
1-5	382-5178-00	BUTTON (POWER)	1
1-6	382-5175-00	BUTTON (VOL DOWN)	1
1-7	382-5176-00	BUTTON (TUN DOWN)	1
1-8	382-5174-00	BUTTON (VOL UP)	1
1-9	382-5177-00	BUTTON (TUN UP)	1
1-10	345-8244-20	SPONGE (LEFT)	1
1-11	345-8309-20	SPONGE	1
1-12	335-5855-01	ILLUMI PLATE (LEFT)	1
1-13	382-5184-01	BUTTON (4)	1
1-14	382-5181-00	BUTTON (1)	1
1-15	382-5185-00	BUTTON (5)	1
1-16	382-5186-00	BUTTON (6)	1
1-17	382-5182-00	BUTTON (2)	1
1-18	382-5183-00	BUTTON (3)	1
1-19	345-8245-20	SPONGE (RIGHT)	1
1-20	382-4462-20	BUTTON (REW)	1
1-21	382-4461-20	BUTTON (FF)	1
1-22	335-5856-20	DOOR ILLUMI	1
1-23	382-5188-00	BUTTON (AF/NEWS)	1
1-24	382-5187-01	BUTTON (TA)	1
1-25	382-4460-20	BUTTON (EJECT)	1
1-26	750-3171-01	SPRING (EJECT)	1
1-27	335-5854-00	ILLUMI PLATE (RIGHT)	1
1-28	750-3138-01	SPRING (FF/REW)	2
1-29	331-2611-20	LCD COVER	1
1-30	379-1066-41	INDICATOR	1
1-31	347-5366-20	FILM	1
1-32	347-5365-20	SHADE	1
1-33	335-5308-20	ILLUMI (LCD)	1
1-34	335-5309-21	LCD HOLDER	1
1-35	345-4441-63	LAMP CAP	3
1-36	017-0410-00	PILOT LAMP	3
1-37	013-3812-11	TACT SW	11
1-38	076-0522-00	PLUG (DCP)	1
1-39	051-6013-00	IC (SW PWB)	1
1-40	039-1407-00	PWB (SW) (WITHOUT COMPONENT)	1
1-41	013-6002-50	TACT SW	5
1-42	345-4441-81	LAMP CAP	2
1-43	017-0441-00	PILOT LAMP	2
1-44	382-5173-00	BUTTON (RELEASE)	1
1-45	716-0872-12	PAD SCREW	6
1-46	335-5857-00	REAR COVER	1
2	370-9006-25	ESCUTCHEON (OUTER)	1
3	716-1792-00	M/C SCREW	2
4	382-4078-20	BUTTON (PUSH-OUT)	1
5	750-3173-00	SPRING (DCP OUT)	2
6	331-0588-30	SPRING HOLDER	1
7	716-0078-00	WAVE SCREW	2
8	335-5853-00	HOOK	1
9	341-1492-00	SHAFT	1
10	750-3174-00	SPRING	1
11	750-3343-20	SPRING (DOOR)	1
12	291-0074-00	STICKER (SECURITY)	1
13	370-5779-00	INNER-ES	1
14	320-5026-71	DUST PROOF CVR	1
15	286-9116-20	SETPLATE	1
16	304-0460-20	LOWER COVER	1
17	731-3006-80	TAP TIGHT	10
18	074-1112-00	OUTLET SOCKET	1
19	309-0723-20	FRONT PLATE	1
20	039-1385-00	MAIN PWB (WITHOUT COMPONENT)	1
21	305-0274-20	SIDE COVER (LEFT)	1
22	313-1751-20	HEAT SINK	1
23	051-2013-00	IC (POWER)	1
24	331-2255-30	IC HOLDER	1
25	714-3006-81	M/C SCREW	3
26	009-9006-60	CHOKE	1
27	092-9000-00	ANT RECEPT	1
28	880-2080C	TUNER BLOCK	1
29	039-1383-00	ISO PWB (WITHOUT COMPONENT)	1
30	074-1115-00	OUTLET SOCKET (ISO)	1
31	060-0057-56	AUTO FUSE (10A)	1
32	305-0275-20	SIDE COVER (RIGHT)	1
33	307-0628-20	REAR PLATE	1
34	347-5943-20	SHADE	1
35	714-3004-81	M/C SCREW	4
36	331-2610-20	MECH-BRKT	1
37	335-5299-21	SPACER (EJECT)	1
38	714-2604-81	M/C SCREW (EJECT)	1
39	303-0472-20	UPPER COVER	1
40	930-0726-80	TAPE-MECH	1
41	331-2744-00	STOPPER	1
42	331-2648-20	SPACER	1

■ EXPLODED VIEW • PARTS LIST

Tape mechanism section: 930-0726-80



NO.	PART NO.	DESCRIPTION	Q'TY
1	960-4421-00	DECK ASSY	1
2	930-4424-00	BOTTOM ASSY	1
3	960-4182-04	FRAME ASSY	1
4	960-4423-00	HEAD-P-ASSY	1
5	960-4186-02	FF-REW-ASSY	1
6	960-4427-00	HEAD-SW-ASSY	1
7	960-4188-03	ROLLER ASSY F	1
8	960-4189-03	ROLLER ASSY R	1
9	960-4190-09	REEL ASSY F	1
10	960-4191-09	REEL ASSY R	1
11	960-4192-02	IDLER ASSY F	1
12	960-4193-02	IDLER ASSY R	1
13	960-4422-00	GUIDE ARM ASSY	1
14	960-4141-04	OFF ARM ASSY	1
15	960-4425-00	EJECT P-ASSY	1
17	011-0313-15	HEAD	1
19	013-3906-00	SWITCH	1
20	013-3922-00	SWITCH	1
21	013-3924-00	SWITCH	1
23	SMA-141-100	DC MOTOR ASSY	1
24	039-0726-00	PWB (WITHOUT COMPONENT)	1
25	099-9669-00	PWB (WITHOUT COMPONENT)	1
26	602-0115-00	BELT	1
27	750-2860-01	ROD SPRING	1
28	604-0042-01	TENSION PULLEY	1
29	606-0100-05	PACK GUIDE	1
30	610-0334-01	HEAD ROLLER B	1
31	610-0363-00	EJECT P-ROLLER	1
32	610-0337-00	GUIDE A-ROLLER	1
33	611-0090-04	FLYWHEEL	2
34	613-0272-10	GEAR A	1
35	613-0273-02	GEAR B	1
36	613-0274-02	IDLER GEAR	2
37	613-0275-03	CHANGE GEAR	1
38	613-0277-02	CHECK GEAR	1
39	630-2488-02	SELECT LEVER	1
40	630-2715-00	FF LEVER-DCP	1

NO.	PART NO.	DESCRIPTION	Q'TY
41	630-2516-00	REW LEVER-DCP	1
42	630-2754-00	EJECT LEVER-DCP	1
43	630-2499-01	CHANGE LEVER	1
44	630-2501-02	CHANGE PLATE	1
45	630-2419-02	SWING ARM	1
46	630-2505-02	FF-REW-LINK	1
47	630-2506-05	RELEASE LINK	1
48	630-2507-04	LOCK LINK	1
50	630-2529-02	MUTE PLATE	1
51	631-1958-05	CHECK LINK	1
52	631-1959-01	CHANGE LINK	1
53	631-1961-03	CHECK PLATE	2
54	631-0658-01	PACK STOPPER	1
55	631-1967-00	SLIDE BUSH	1
57	714-2008-81	MACHINE SCREW	2
58	716-0484-02	SCREW	1
59	716-1471-00	S-TIGHT	2
60	716-1473-01	HEAD SCREW	7
62	745-0752-00	PLATE SPRING	1
63	745-0756-00	SPRING WASHER	1
64	746-0712-03	WASHER	2
65	746-0724-00	WASHER	1
66	746-0768-00	WASHER	6
67	746-0839-00	CAPSTAN WASHER	8
68	746-0869-00	WASHER	4
69	746-0622-01	WASHER	2
70	750-2564-01	SLIDE SPRING	1
71	750-2904-02	FF-REW SPRING	2
72	750-2858-01	EJECT P-SPRING	2
73	750-2906-00	IDLER SPRING	1
74	750-2907-03	CHANGE L-SPRING	1
75	750-2908-02	HEAD SPRING	1
76	750-2909-04	ROD SPRING	1
77	750-2861-01	SLOT-IN SPRING	1
78	750-2911-01	HOLDING SPRING	1
79	750-2912-01	PINCH SPRING	1
81	750-2919-03	CHECK SPRING-R	2
82	750-2857-02	EJECT L-SPRING	1
83	750-2859-00	OFF ARM SPRING	1

■ ELECTRICAL PARTS LIST

Main PWB Section (B1)

Note: Several different parts of the same reference number are alternative parts. One of those parts is used in the set.

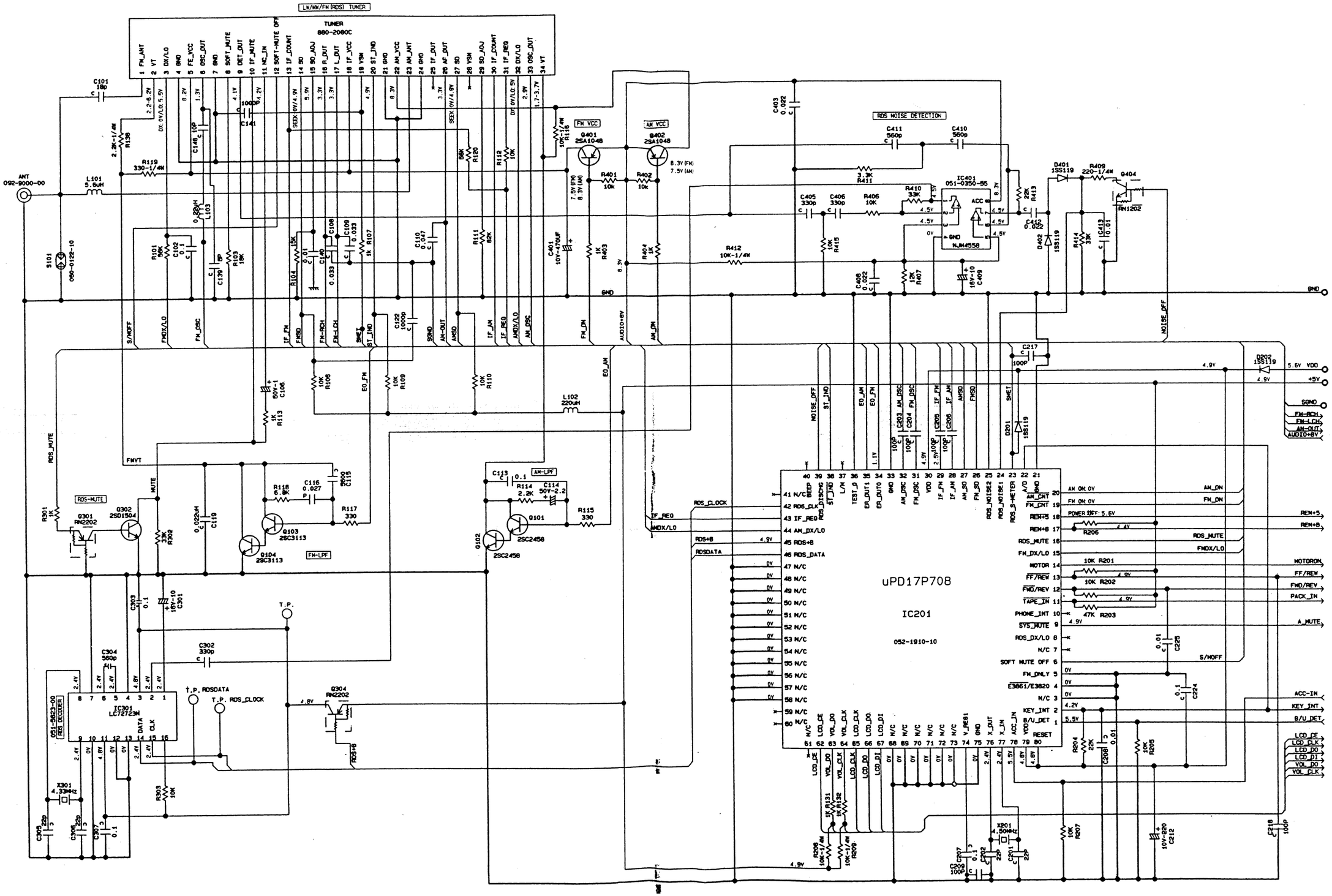
REF No.	PART No.	DESCRIPTION
C 101	176-1801-00	18pF CH
C 102	178-1042-05	0.1μF
C 106	183-1053-62	50V-1μF
C 108	178-3332-05	0.033μF
C 109	178-3332-05	0.033μF
C 110	178-4732-05	0.047μF
C 113	178-1042-05	0.1μF
C 114	183-2253-62	50V-2.2μF
C 115	178-5622-05	5600pF
C 116	178-2732-05	0.027μF
C 119	178-2232-05	0.022μF
C 122	178-1022-05	1000pF
C 139	176-5096-00	5pF CH
C 140	178-1032-05	0.01μF
C 141	178-1022-05	1000μF
C 148	176-1007-00	10pF CH
C 201	176-2201-00	22pF CH
C 202	176-2201-00	22pF CH
C 203	176-1011-00	100pF CH
C 204	176-1011-00	100pF CH
C 205	176-1011-00	100pF CH
C 206	176-1011-00	100pF CH
C 207	178-1042-05	0.1μF
C 208	178-1032-05	0.01μF
C 209	176-1011-00	100pF CH
C 212	182-2273-22	10V-220μF
C 217	176-1011-00	100pF CH
C 218	176-1011-00	100pF CH
C 224	178-1042-05	0.1μF
C 225	178-1032-05	0.01μF
C 301	182-1063-32	16V-10μF
C 302	178-3312-05	330pF
C 303	178-1042-05	0.1μF
C 304	178-5612-05	560pF
C 305	176-2201-00	22pF CH
C 306	176-2201-00	22pF CH
C 307	178-1042-05	0.1μF
C 401	184-4773-22	10V-470μF
C 403	178-2232-05	0.022μF
C 405	178-3312-05	330pF
C 406	178-3312-05	330pF
C 408	178-2232-05	0.022μF
C 409	182-1063-32	16V-10μF
C 410	178-5612-05	560pF
C 411	178-5612-05	560pF
C 412	178-2232-05	0.022μF
C 413	178-1032-05	0.01μF
C 501	178-1032-05	0.01μF
C 502	183-2273-22	10V-220μF
C 503	184-2283-32	16V-2200μF
C 504	172-1041-11	0.1μF
C 505	172-4731-11	0.047μF
C 506	183-1063-32	16V-10μF
C 507	182-2273-22	10V-220μF
C 508	182-1063-32	16V-10μF
C 509	182-1063-32	16V-10μF
C 510	182-1063-32	16V-10μF
C 601	178-1822-05	1800pF
C 602	178-1822-05	1800pF
C 603	182-4743-63	50V-0.47μF
C 604	182-4743-63	50V-0.47μF
C 605	182-1073-13	6.3V-100μF
C 606	178-2732-05	0.027μF
C 607	182-4763-33	16V-47μF
C 608	178-2732-05	0.027μF
C 609	182-1073-13	6.3V-100μF
C 610	182-3343-62	50V-0.33μF
C 611	178-4732-05	0.047μF
C 612	182-1063-32	16V-10μF
C 613	182-2253-62	50V-2.2μF
C 615	176-5601-00	56pF CH
C 616	182-4753-52	35V-4.7μF
C 619	182-4763-12	6.3V-47μF
C 620	182-2263-32	16V-22μF
C 621	178-5622-05	5600pF
C 622	178-5632-05	0.056μF
C 623	178-5622-05	5600pF
C 624	182-1063-32	16V-10μF
C 625	182-1063-32	16V-10μF
C 626	182-2253-62	50V-2.2μF
C 628	176-5601-00	56pF CH
C 630	182-4753-52	35V-4.7μF
C 631	182-2263-32	16V-22μF
C 632	178-5632-05	0.056μF
C 633	178-5622-05	5600pF
C 634	178-5622-05	5600pF
C 635	182-1063-32	16V-10μF
C 636	182-4763-12	6.3V-47μF
C 638	182-4763-33	16V-47μF
C 639	182-1073-13	6.3V-100μF
C 701	171-1042-06	0.1μF
C 702	171-1042-06	0.1μF
C 703	171-1042-06	0.1μF
C 704	171-1042-06	0.1μF
C 705	176-1011-00	100pF CH
C 706	176-1011-00	100pF CH
C 707	176-1011-00	100pF CH
C 708	176-1011-00	100pF CH
C 709	183-1053-62	50V-1μF
C 710	178-1042-05	0.1μF
C 711	183-4763-32	16V-47μF
C 713	178-1042-05	0.1μF
D 201	001-0330-00	1SS119
D 202	001-0330-00	1SS119
D 401	001-0330-00	1SS119
D 402	001-0330-00	1SS119
D 501	001-0376-35	MTZJ6.2B
D 502	001-0376-48	MTZJ9.1C
D 503	001-0376-36	MTZJ6.2C
D 504	001-0376-35	MTZJ6.2B
D 505	001-0376-47	MTZJ9.1B
D 507	001-0188-01	1SS1885A
D 508	001-0466-00	S5688B
D 510	001-0330-00	1SS119
D 511	001-0330-00	1SS119
D 512	001-0466-00	S5688B
D 513	001-0330-00	1SS119
D 514	001-0330-00	1SS119
D 515	001-0330-00	1SS119
D 518	001-0466-00	S5688B
D 601	001-0376-23	MTZJ4.3B
D 721	001-0466-00	S5688B
D 722	001-0466-00	S5688B
D 723	001-0466-00	S5688B
D 724	001-0466-00	S5688B
D 725	001-0466-00	S5688B
D 726	001-0466-00	S5688B
D 727	001-0466-00	S5688B
D 728	001-0466-00	S5688B
IC 201	052-1910-10	μPD17708GC
IC 301	051-5823-00	LC72723M
IC 401	051-0350-55	NJM4558M
IC 402	051-5008-00	M62419FP
IC 601	051-0272-00	LA3161
IC 701	051-2013-00	TDA7385
L 101	010-2330-17	5.6μH
L 102	010-2330-36	220μH
L 103	010-2330-00	0.22μH
L 203	010-2330-36	220μH
L 501	009-9006-60	CHOKE
Q 101	102-2458-00	2SC2458
Q 102	102-2458-00	2SC2458
Q 103	102-3113-00	2SC3113
Q 104	102-3113-00	2SC3113
Q 301	125-0003-02	RN2202
Q 302	193-1504-00	2SD1504
Q 304	125-0003-02	RN2202
Q 401	100-1048-00	2SA1048
Q 402	100-1048-00	2SA1048
Q 404	125-2003-02	RN1202
Q 501	100-1048-00	2SA1048
Q 503	125-0003-02	RN2202
Q 504	102-2458-00	2SC2458
Q 505	125-0003-02	RN2202
Q 506	102-2458-00	2SC2458
Q 507	103-1858-00	2SD1858
Q 508	103-1858-00	2SD1858
Q 512	103-1858-00	2SD1858
Q 513	103-1858-00	2SD1858
Q 514	103-1858-00	2SD1858
Q 515	101-1240-00	2SB1240
Q 516	125-2003-02	RN1202
Q 517	100-1048-00	2SA1048
Q 518	101-1237-00	2SB1237
Q 519	125-2003-03	RN1203
Q 520	125-2003-03	RN1203
Q 521	125-2003-03	RN1203
Q 601	101-1240-00	2SB1240
Q 602	125-2003-03	RN1203
R 101	117-5631-10	1/10W 56kΩ
R 103	117-1831-10	1/10W 18kΩ
R 104	117-1531-10	1/10W 15kΩ
R 106	117-1031-10	1/10W 10kΩ
R 107	117-1021-10	1/10W 1kΩ
R 109	117-1031-10	1/10W 10kΩ
R 110	117-1031-10	1/10W 10kΩ
R 111	117-8231-10	1/10W 82kΩ
R 112	117-1031-10	1/10W 10kΩ
R 113	117-1021-10	1/10W 1kΩ
R 114	117-2221-10	1/10W 2.2kΩ
R 115	117-3311-10	1/10W 330Ω
R 116	111-1031-91	1/4W 10kΩ
R 117	117-3311-10	1/10W 330Ω
R 118	117-6821-10	1/10W 6.8kΩ
R 119	111-3311-91	1/4W 330Ω
R 120	117-5631-10	1/10W 56kΩ
R 131	117-1021-10	1/10W 1kΩ
R 132	117-1021-10	1/10W 1kΩ
R 138	111-2221-91	1/4W 2.2kΩ
R 201	117-1031-10	1/10W 10kΩ
R 202	117-1031-10	1/10W 10kΩ
R 203	117-4731-10	1/10W 47kΩ
R 204	117-2231-10	1/10W 22kΩ
R 205	117-1031-10	1/10W 10kΩ
R 206	117-1021-10	1/10W 1kΩ
R 207	117-1031-10	1/10W 10kΩ
R 208	117-1031-91	1/4W 10kΩ
R 209	117-1031-91	1/4W 10kΩ
R 301	117-1021-10	1/10W 1kΩ
R 302	117-3331-10	1/10W 33kΩ
R 303	117-1031-10	1/10W 10kΩ
R 401	117-1031-10	1/10W 10kΩ
R 402	117-1031-10	1/10W 10kΩ
R 403	117-1021-10	1/10W 1kΩ
R 404	117-1021-10	1/10W 1kΩ
R 406	117-1031-10	1/10W 10kΩ
R 407	117-1231-10	1/10W 12kΩ
R 409	111-2211-91	1/4W 220Ω
R 410	117-3331-10	1/10W 33kΩ
R 411	117-3321-10	1/10W 3.3kΩ
R 412	111-1031-91	1/4W 10kΩ
R 413	117-2231-10	1/10W 22kΩ
R 414	117-3331-10	1/10W 33kΩ
R 415	117-1031-10	1/10W 10kΩ
R 501	117-1031-10	1/10W 10kΩ
R 502	111-1021-91	1/4W 1kΩ
R 505	117-1531-10	1/10W 15kΩ
R 506	117-2231-10	1/10W 22kΩ
R 507	111-2291-91	1/4W 2.2Ω
R 508	111-2291-91	1/4W 2.2Ω
R 509	111-4711-91	1/4W 470Ω
R 511	111-4731-91	1/4W 47kΩ
R 512	111-1031-91	1/4W 10kΩ
R 513	111-2291-91	1/4W 2.2Ω
R 514	111-2291-91	1/4W 2.2Ω
R 515	111-4711-91	1/4W 470Ω
R 517	111-1021-91	1/4W 1kΩ
R 518	111-1031-91	1/4W 10kΩ
R 521	111-1021-91	1/4W 1kΩ
R 525	111-5691-91	1/4W 5.6Ω
R 526	111-5691-91	1/4W 5.6Ω
R 527	111-5691-91	1/4W 5.6Ω
R 528	111-1031-91	1/4W 10kΩ
R 529	111-2221-91	1/4W 2.2kΩ
R 530	117-1031-10	1/10W 10kΩ
R 531	111-2221-91	1/4W 2.2kΩ
R 532	111-1031-91	1/4W 10kΩ
R 533	111-4721-91	1/4W 4.7kΩ
R 534	111-1021-91	1/4W 1kΩ
R 535	117-8221-10	1/10W 8.2kΩ
R 536	117-2231-10	1/10W 22kΩ
R 601	117-3331-10	1/10W 33kΩ
R 602	117-3331-10	1/10W 33kΩ
R 603	117-8201-10	1/10W 82Ω
R 604	117-1241-10	1/10W 120kΩ
R 607	117-4721-10	1/10W 4.7kΩ
R 608	117-4721-10	1/10W 4.7kΩ
R 609	117-1241-10	1/10W 120kΩ
R 611	117-8201-10	1/10W 82Ω
R 614	111-8211-81	1/2W 820Ω
R 615	111-1031-91	1/4W 10kΩ
R 616	117-1231-10	1/10W 12kΩ
R 617	117-2721-10	1/10W 2.7kΩ
R 618	117-2231-10	1/10W 22kΩ
R 621	117-1231-10	1/10W 12kΩ
R 622	117-2721-10	1/10W 2.7kΩ
R 623	117-2231-10	1/10W 22kΩ
R 624	117-4731-10	1/10W 47kΩ
R 627	111-3311-91	1/4W 330Ω
R 628	117-4731-10	1/10W 47kΩ
R 701	117-1031-10	1/10W 10kΩ
R 702	111-3331-91	1/4W 33kΩ
R 703	111-3331-91	1/4W 33kΩ
R 704	111-3331-91	1/4W 33kΩ
R 705	111-3331-91	1/4W 33kΩ
R 706	117-1031-10	1/10W 10kΩ
S 101	060-0122-10	
T	092-9000-00	ANT
X 201	061-1064-00	4.50MHz
X 301	016-3013-00	4.33MHz

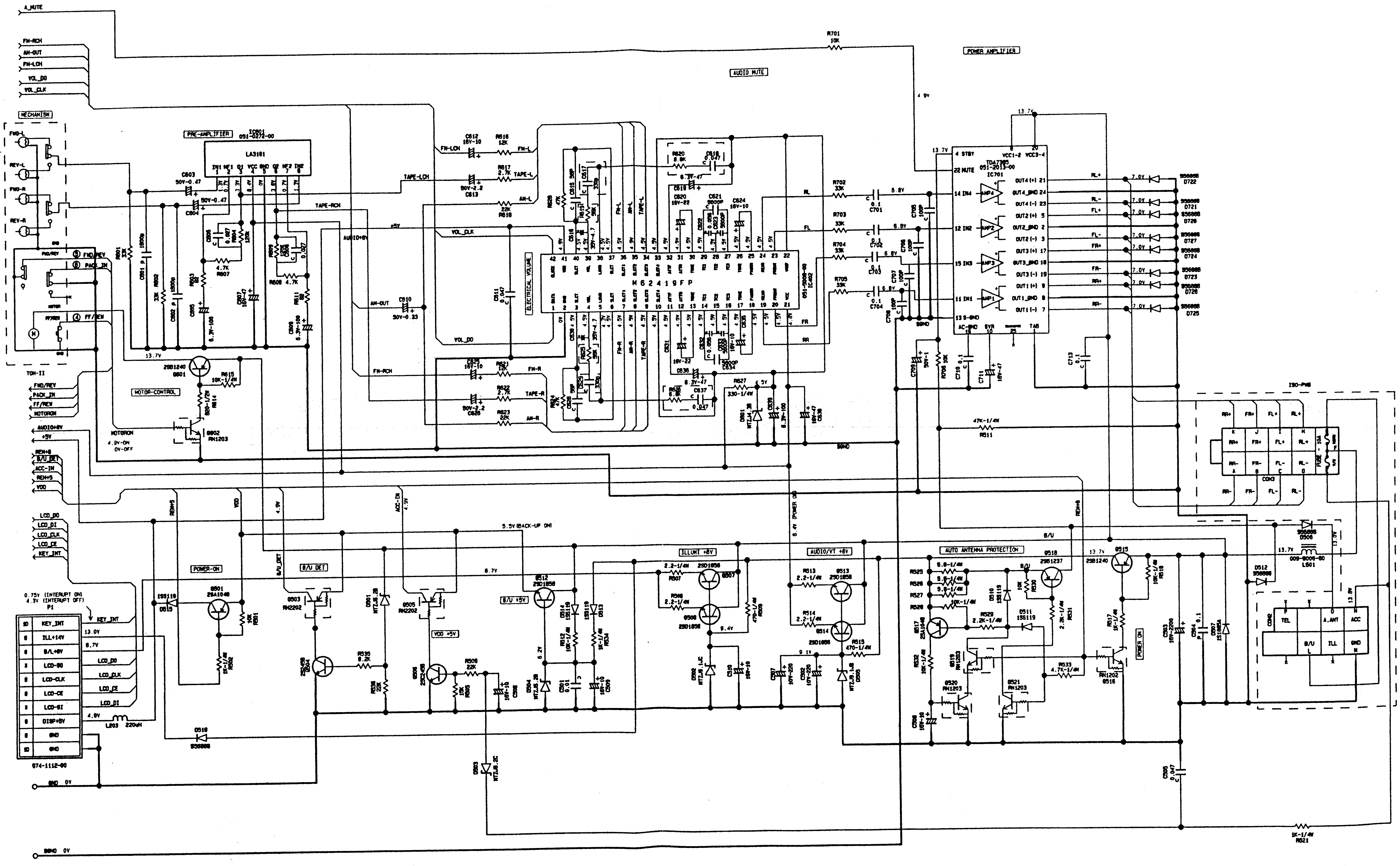
Switch PWB Section (B2)

REF No.	PART No.	DESCRIPTION
C 1	178-1822-05	1800μF
C 2	178-4732-05	0.047μF
C 3	178-4732-05	0.047μF
C 4	178-4732-05	0.047μF
IC 1	051-6013-00	LC75854W
DCP1	076-0522-00	PLUG
PL 1	017-0410-00	14V40mA
PL 2	017-0410-00	14V40mA
PL 3	017-0410-00	14V40mA
PL 5	017-0441-00	9V85mA
PL 6	017-0441-00	9V85mA
R 1	117-2221-10	1/10W 2.2kΩ
R 2	117-2221-10	1/10W 2.2kΩ
R 3	117-2221-10	1/10W 2.2kΩ
R 4	117-3921-10	1/10W 3.9kΩ
R 5	117-1241-10	1/10W 120kΩ
R 6	117-2221-10	1/10W 2.2kΩ
R 7	117-1031-10	1/10W 10kΩ
R 8	117-6831-10	1/10W 68kΩ
S 1	013-6002-50	
S 2	013-3812-11	
S 3	013-3812-11	
S 4	013-6002-50	
S 5	013-6002-50	
S 6	013-3812-11	
S 7	013-3812-11	
S 8	013-3812-11	
S 10	013-6002-50	
S 11	013-3812-11	
S 12	013-6002-50	
S 13	013-3812-11	
S 14	013-3812-11	
S 15	013-3812-11	
S 16	013-3812-11	

■ CIRCUIT DIAGRAM

Main / Connector P.W.B. section

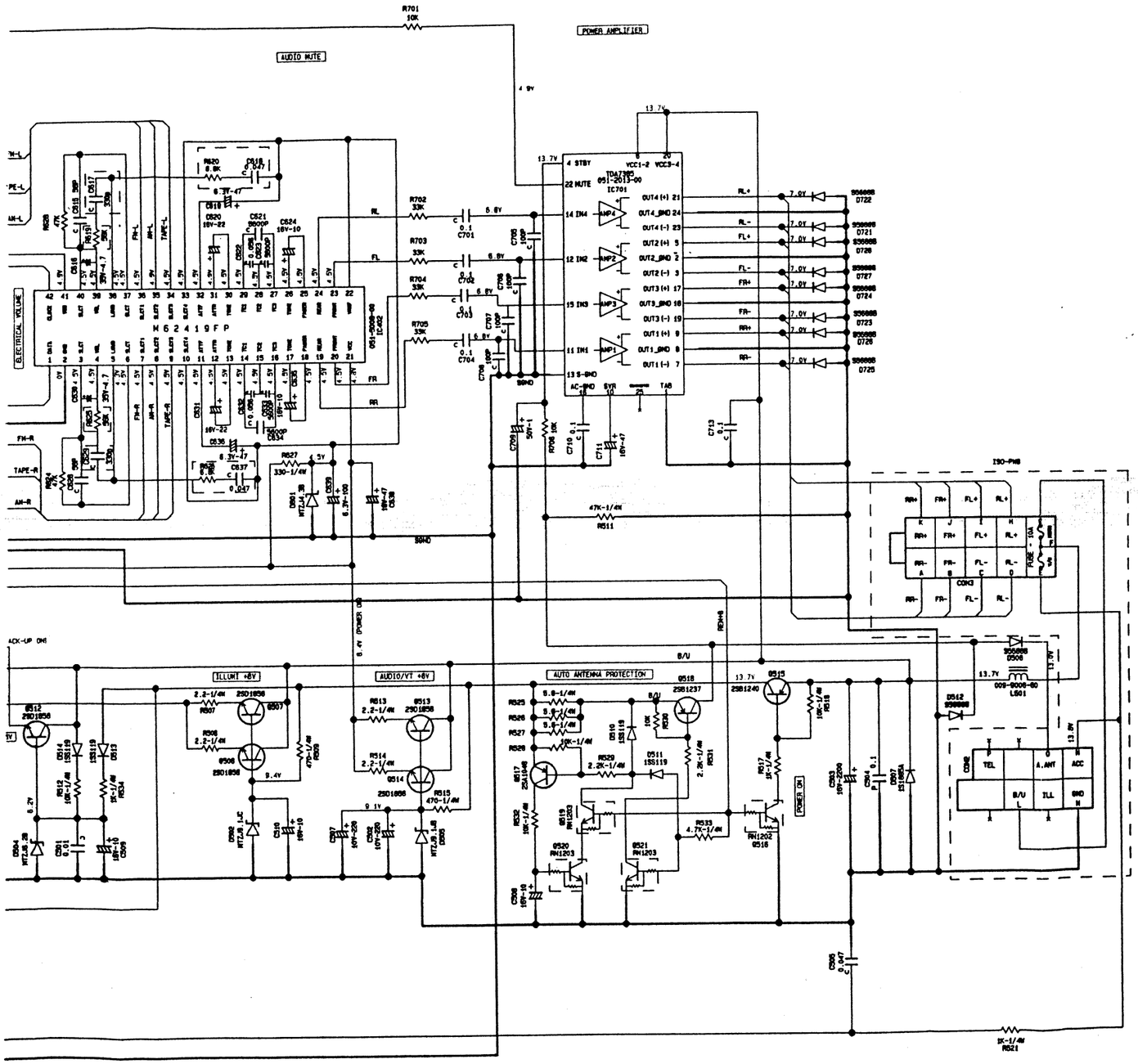


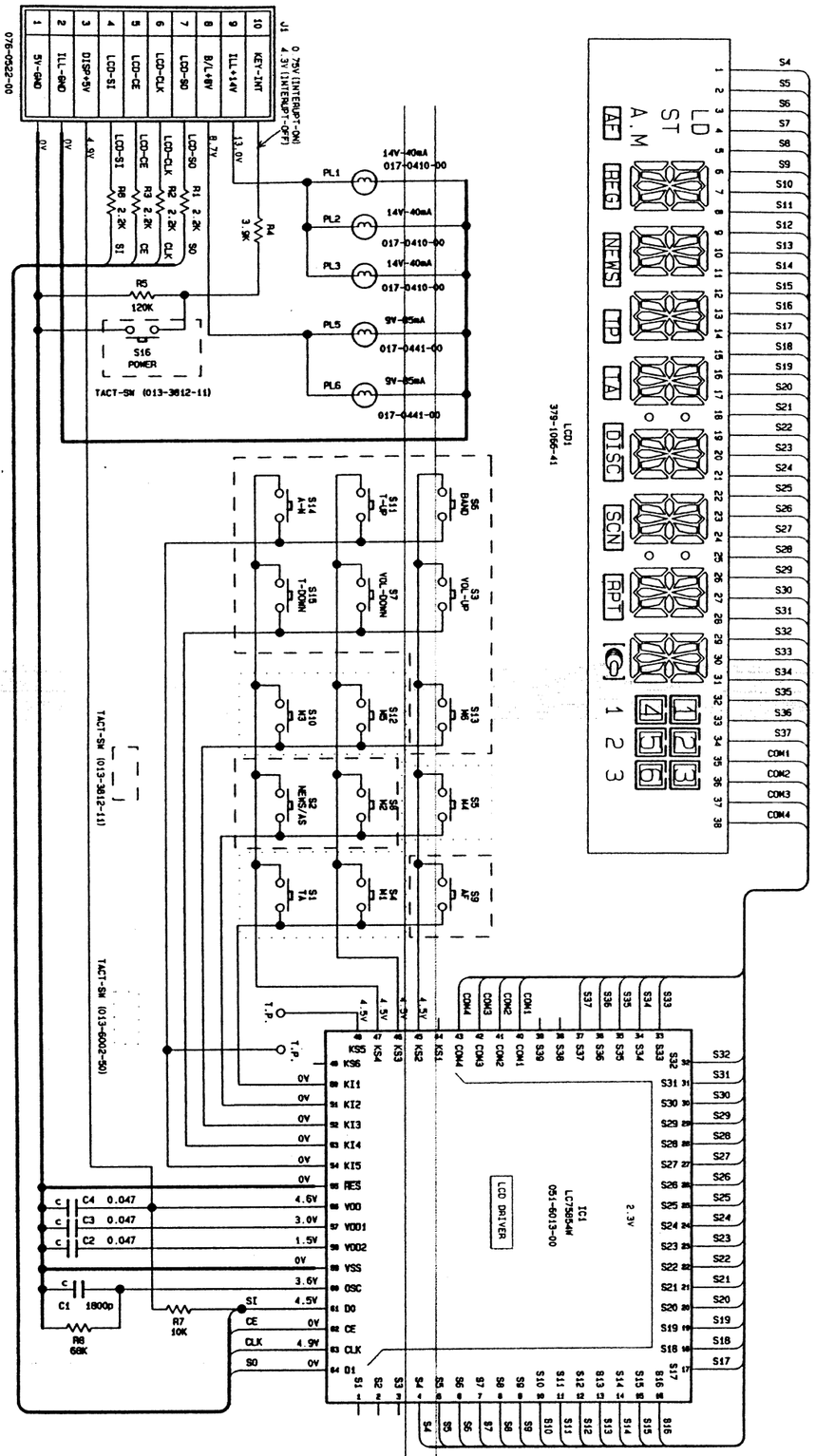

A_MUTE
FM-RCH
AM-OUT
FM-LCH
VOL_DO
VOL_CLK
MECHANISM
FWD-L
REV-L
FWD-R
REV-R
FWD/REV
PACK_IN
FF/REW
MOTORON
TCM-II
PRE-AMPLIFIER
IC601
051-0272-00
LA3161
MOTOR-CONTROL
2SB1240
Q601
R615
10K-1/4W
R614
820-1/2W
Q602
RN1203
4.3V-ON
0V-OFF
AUDIO+8V
+5V
REM+8
B/U_DET
ACC-IN
REM+5
VDD
LCD_DO
LCD_DI
LCD_CLK
LCD_CE
KEY_INT
0.75V (INTERUPT ON)
4.3V (INTERUPT OFF)
P1
ILL+14V
B/L+8V
LCD-SO
LCD-CLK
LCD-CE
LCD-SI
DISP+5V
GND
074-1112-00
L203 220uH
D516
SS6668
GND 0V
SGND 0V
AUDIO MUTE
R701
10K
ELECTRICAL VOLUME
M62419FP
051-5008-00
IC402
TAPE-LCH
TAPE-RCH
FM-L
TAPE-L
AM-L
FM-R
TAPE-R
AM-R
RL
FL
FR
RR
R702 33K
R703 33K
R704 33K
R705 33K
C701
C702
C703
C704
SGND
POWER AMPLIFIER
TDA7385
051-2013-00
IC701
STBY
MUTE
VCC1-2
VCC3-4
AMP1
AMP2
AMP3
AMP4
OUT4(+) 21
OUT4_GND 24
OUT4(-) 23
OUT2(+) 5
OUT2_GND 2
OUT2(-) 3
OUT3(+) 17
OUT3_GND 18
OUT3(-) 19
OUT1(+) 9
OUT1_GND 8
OUT1(-) 7
AC-GND
SVR
TAB
RL+
RL-
FL+
FL-
FR+
FR-
RR+
RR-
7.0V
SS6668
D721
D722
D723
D724
D725
D726
D727
D728
47K-1/4W
R511
ISO-PWB
CON3
FUSE - 10A
POWER-ON
Q501
2SA1048
D515
1SS119
B/U DET
Q503
RN2202
Q504
2SC2458
R535
8.2K
R536
22K
D501
MTZJ6.2B
Q505
RN2202
VDD +5V
Q506
2SC2458
R506
22K
D503
MTZJ6.2C
5.5V (BACK-UP ON)
8.7V
B/U +5V
Q512
2SD1858
ILLUMI +8V
Q507
2SD1858
Q508
2SD1858
R507
R508
2.2-1/4W
R509
470-1/4W
AUDIO/VT +8V
Q513
2SD1858
Q514
2SD1858
R513
R514
R515
470-1/4W
8.4V (POWER ON)
AUTO ANTENNA PROTECTION
R525
R526
R527
R528
5.6-1/4W
10K-1/4W
Q517
2SA1048
Q518
2SB1237
Q515
2SB1240
Q519
RN1203
Q520
RN1203
Q521
RN1203
Q516
RN1202
R529
2.2K-1/4W
R533
4.7K-1/4W
D510
1SS119
D511
1SS119
POWER ON
C503
16V-2200
C504
0.1
D507
1S1885A
C505
0.047
D512
SS6668
D506
SS6668
009-8006-60
L501
13.7V
CON2
TEL
A.ANT
ACC
B/U
ILL
R521
1K-1/4W

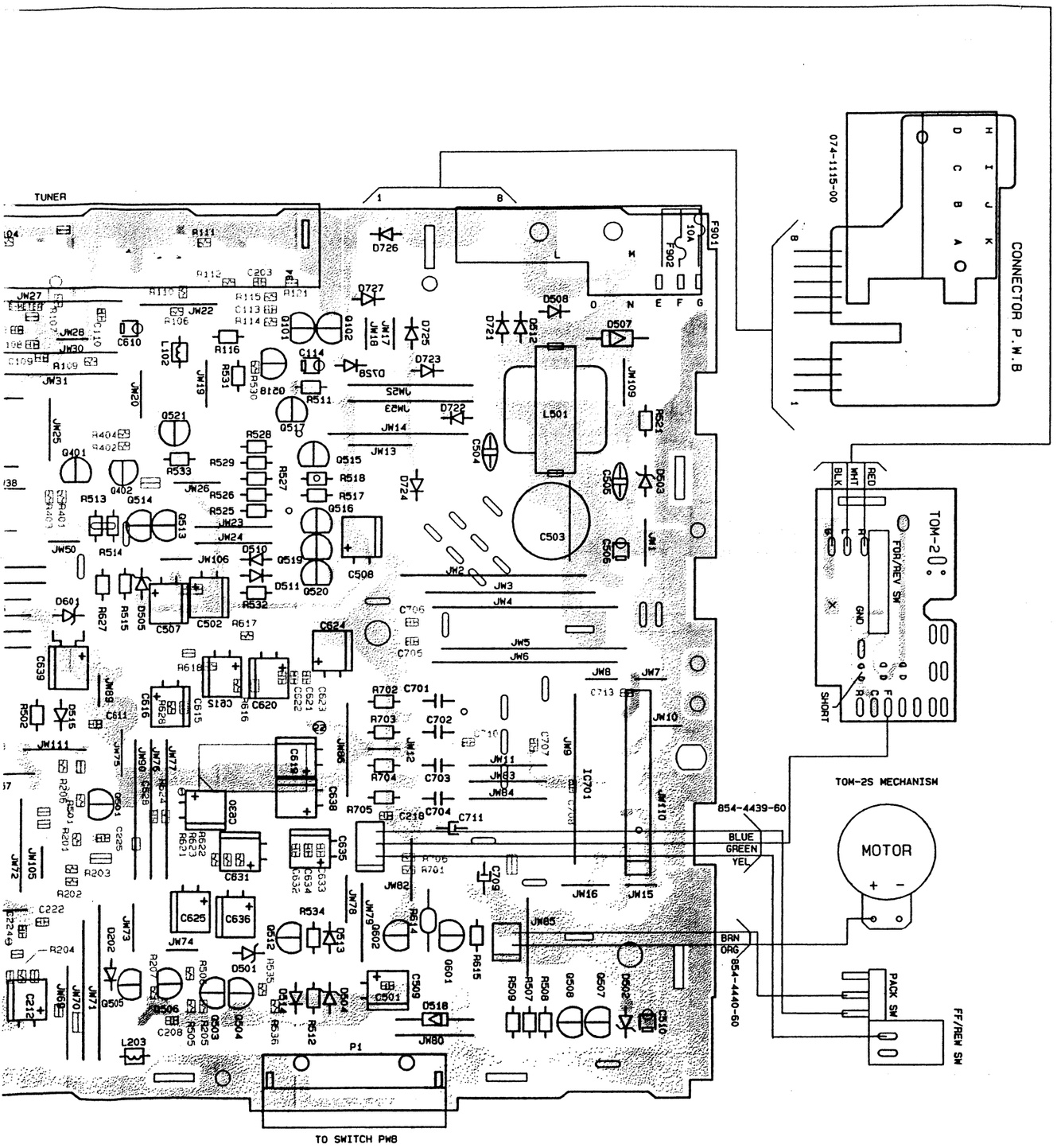
ARB2570R

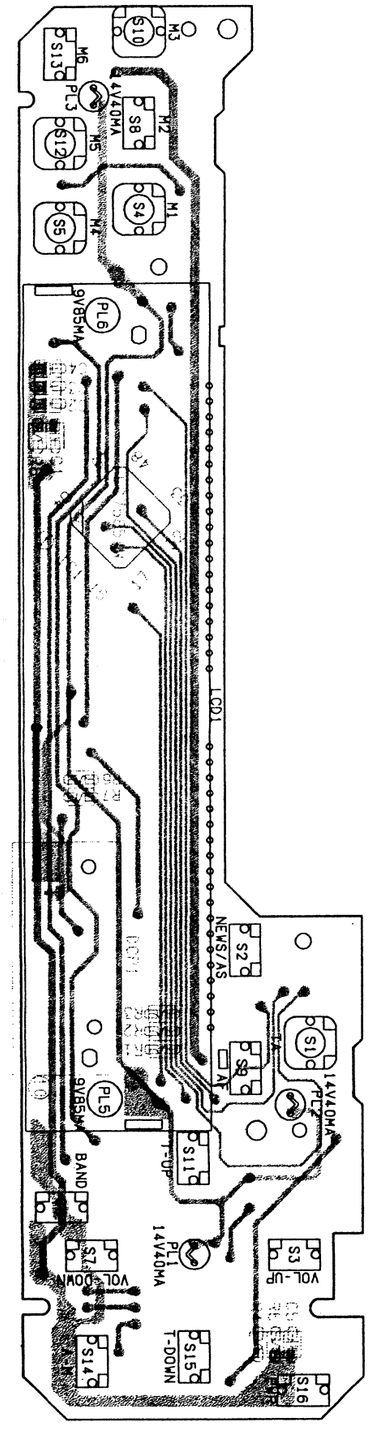
■ CIRCUIT DIAGRAM

Main / Connector section





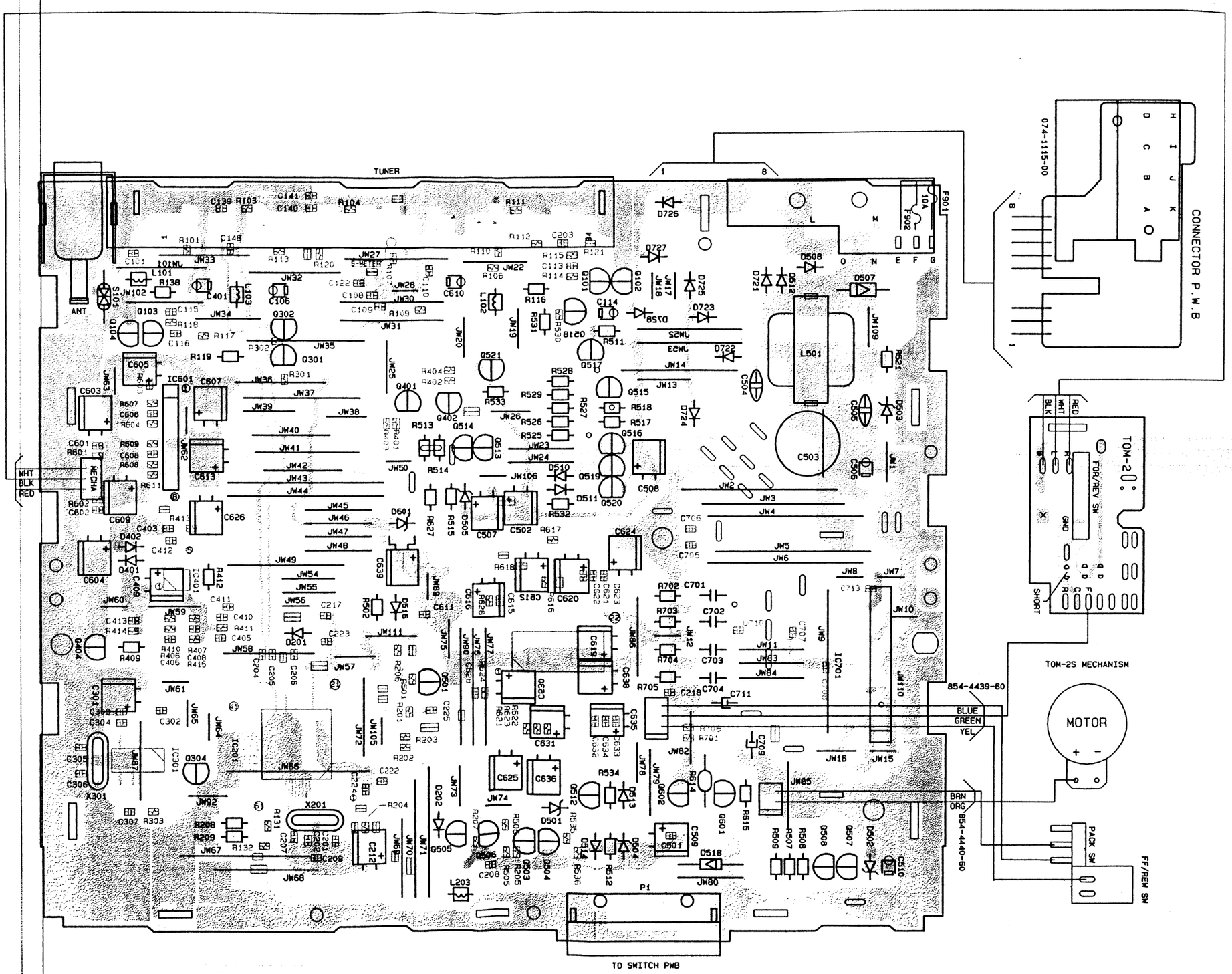

TUNER
CONNECTOR P.W.B
074-1115-00
TOM-20° MECHANISM
MOTOR
854-4439-60
854-4440-60
BLUE
GREEN
YEL
BRN
ORG
RED
WHT
BLK
GND
SHORT
FOR/REV SW
PACK SW
FF/REV SW
TO SWITCH PWB
P1
L501
IC701
L203


14V40MA
9V85MA
NEWS/AS
T-UP
T-DOWN
VOL-UP
VOL-DOWN
BAND
LCD1

■ EXPLODED VIEW • PART LIST

Main Section

Q	IC
Q101, Q102	
Q518	
Q104, Q103, Q302	
Q517	
Q301	
Q521	
Q515	
Q401, Q402	
	IC601
Q514, Q513, Q516	
Q519	
Q520	
	IC401
Q404	IC405, IC701
Q501	
	IC501
	IC301
Q304	
Q512, Q602, Q601	
Q505, Q506	
Q503, Q504	
Q508, Q507	



ARB2570R